

KB4647B45 (KLB-520 B-08-T)

1. Descriptions

KB4647B45 (KLB-520 B-08-T) is a high bright InGaN blue LED and has the optimized optical characteristics.

2. Features

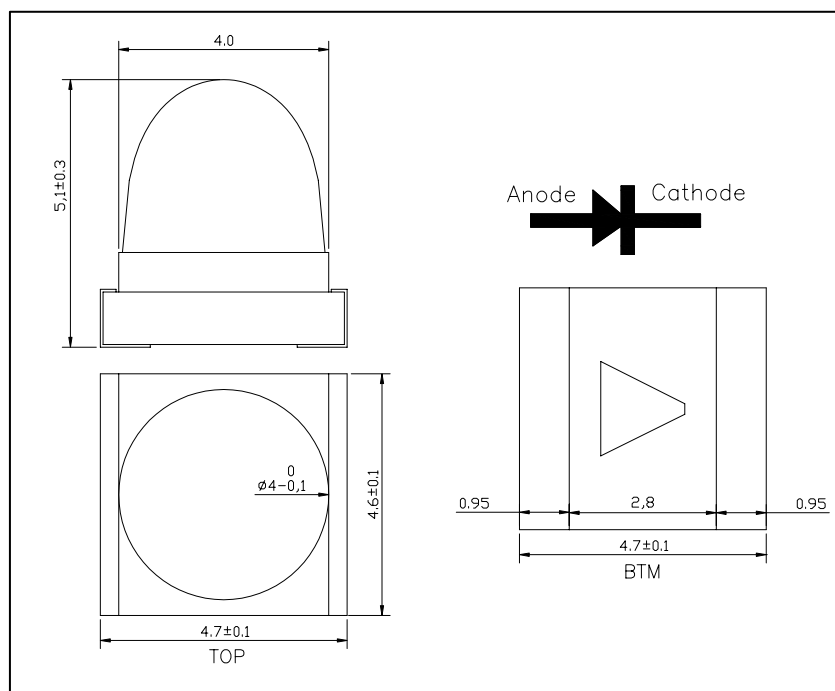
- ◆ Transparent epoxy lens
- ◆ High Optical Output
- ◆ Typical Luminous Intensity(IV)
: 5cd for Blue @ IF=20mA

3. Application

- ◆ Display
- ◆ Indicator
- ◆ Signage
- ◆ Auto Focus
- ◆ Amusement

4. Outline Dimensions and Material Descriptions

- ◆ Outline Dimensions



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KB4647B45 (KLB-520 B-08-T)**5. Absolute Maximums**

| Parameter | Symbol | Ratings | Unit |
|-------------------------------------|------------|------------|------|
| Reverse voltage | V_R | 5 | V |
| Forward current | I_F | 30 | mA |
| Pulse forward current ^{*1} | I_{FP} | 0.3 | A |
| Power dissipation | P_D | 105 | mW |
| Operating temperature | $T_{opr.}$ | -30 ~ +85 | °C |
| Storage temperature | $T_{stg.}$ | -40 ~ +100 | °C |
| Soldering Temperature ^{*2} | $T_{sol.}$ | 260 | °C |

*1. IFP Measured under duty : 1/100 @ $t_w=10ms$

*2. For MAX.5 seconds at the position of 2mm from the package

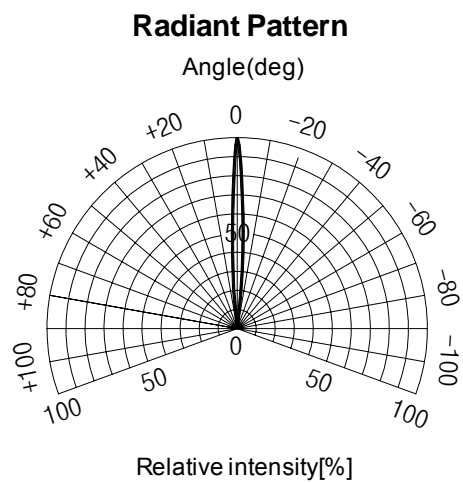
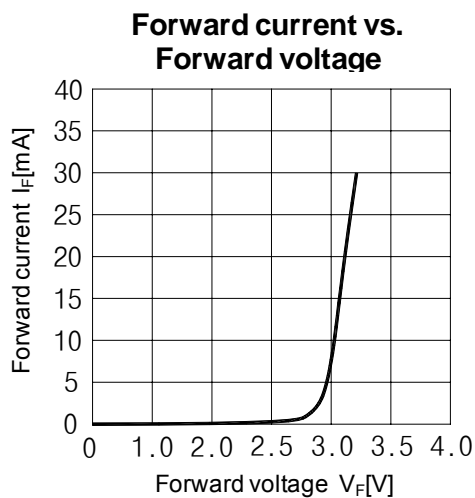
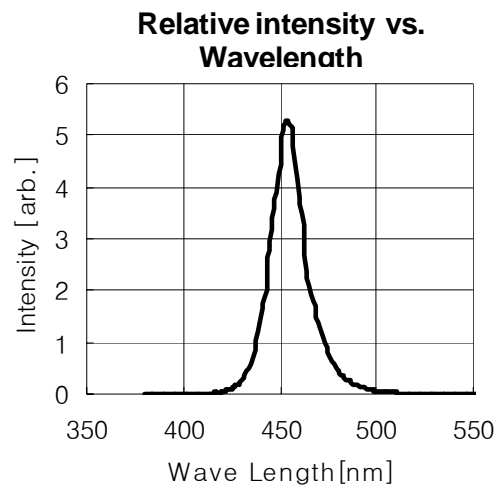
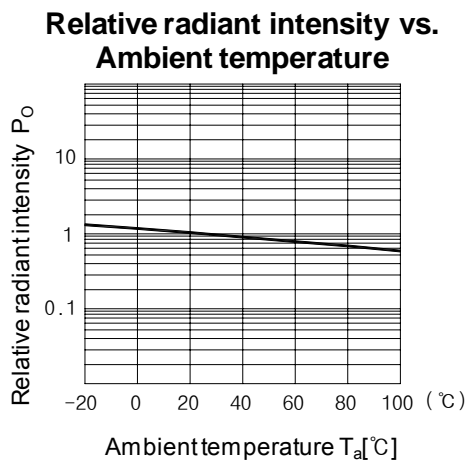
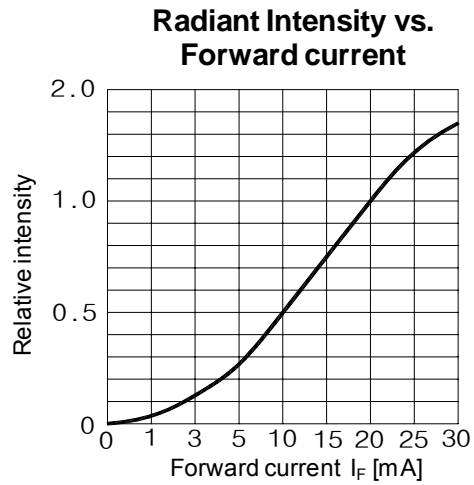
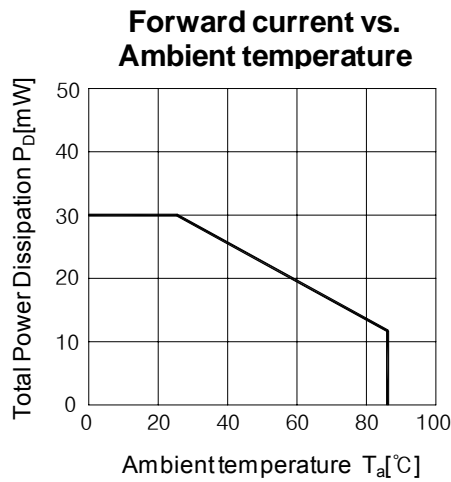
6. Electro-Optical Characteristics ($T_A = 25^\circ C$)

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------|-----------------------|----------------------|-----|-----|-----|---------|
| Forward voltage | V_F | $I_F = 20\text{ mA}$ | | 3.2 | 3.5 | V |
| Reverse current | I_R | $V_R = 5\text{ V}$ | - | - | 50 | μA |
| Luminous Intensity | I_V | $I_F = 20\text{ mA}$ | 3 | 5 | - | cd |
| Dominant Wave Length | λ_D | $I_F = 20\text{ mA}$ | 450 | - | 460 | nm |
| Spectral half bandwidth | $\Delta\lambda$ | $I_F = 20\text{ mA}$ | - | 15 | - | nm |
| Half angle | $2\Delta\theta_{1/2}$ | $I_F = 20\text{ mA}$ | - | 8 | - | deg. |

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7. Characteristic Graphs



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